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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,183	11/28/2001	Richard C. Abbott	50243/003002	2277

7590 05/27/2003
Timothy J. Oyer, Ph.D.
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600 Atlantic Avenue
Boston, MA 02210

EXAMINER

FASTOVSKY, LEONID M

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 05/27/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,183

Applicant(s)

ABBOTT ET AL.

Examiner

Leonid M Fastovsky

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 31-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7,10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-30, drawn to a resistive heater and a method of fabricating, classified in class 219, subclass 543.
 - II. Claims 31-38, drawn to an injection mold, classified in class 425, subclass 547.
 - III. Claims 39-46, drawn to a method of making a molded product, classified in class 219, subclass 424.
 - IV. Claim 47, drawn to a roller, classified in class 219, subclass 469.
 - V. Claim 48, drawn to a method of drying paper, classified in class 34, subclass 95.
 - VI. Claims 49-50, drawn to a semiconductor wafer heating system and method, classified in class 219, subclass 444.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-V and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated because they have different modes of operation and different functions, specifically, group I discloses a resistive heater, group II discloses an injection mold, group III discloses a method of making a

Art Unit: 3742

molded product, group IV discloses a method of drying paper, group V discloses a roller, and group Vi discloses a semiconductor wafer heating system and method.

3. During a telephone conversation with Mr. Peter Nieves on 5/19/03 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 31-50 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because the phrase "the present invention" should be avoided. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3742

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-15, 17, 19 and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ros (3,922,386) in view of Hyllberg (6,069,346).

Ros discloses a resistive heater and a resistive heater manufacturing process (Figures 1-3) comprising applying a resistive layer comprising a metallic component and an oxide thereof to a substrate (Col. 3, lines 23-53). Ros does not disclose a resistivity for the resistive layer. Hyllberg discloses a resistivity range from 1000 ohm-cm to 0.000001 ohm-cm (Col.4, lines 44-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form thin-film electric heater layers within claimed resistivity range as taught by Hyllberg to ultimately generate heat upon the passage of current therethrough.

8. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ros in view of Hyllberg (5,616,263).

Ros disclose substantially the claimed features including a resistive heater and the manufacturing process comprising applying a resistive layer comprising a metallic component an oxide thereof to a substrate. Ros does not call for the substrate to be a roller, mold, or platen and a superficial metallic layer with respect to the resistive layer. Hyllberg discloses applying a thin-film resistive layer 14 to a roller so that the electric heater is disposed over the entire roller surface uniformly thus resulting in more uniform heating of the workpiece contacting the roller. A metallic layer 15 is superficial to the heater layer 14. In view of Hyllberg, it would have been obvious to one having ordinary skill in the art to apply the electric layer of Ros to a roller substrate so that the electric

Art Unit: 3742

heater is disposed over the entire roller surface uniformly thus resulting in more uniform heating of the workpiece contacting the roller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 703-306-5482. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-3081327. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.



Leonid M Fastovsky
Examiner
Art Unit 3742

lmf
May 20, 2003